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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,792	02/22/2000	Clifford Heath	659-28	2005

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EXAMINER

VEILLARD, JACQUES

ART UNIT	PAPER NUMBER
2175	16

DATE MAILED: 12/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/507,792	Applicant(s) Heath et al.
Examiner JACQUES VEILLARD	Art Unit 2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Oct 4, 2002

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-9 and 11-16 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-9 and 11-16 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

4) Interview Summary (PTO-413) Paper No(s). _____

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 14

6) Other:

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DETAILED ACTION

1. This is in response to the Applicant amendment filed on May 15, 2002 in which Applicant acknowledge that the amendment was sent to the wrong case and faxed a copy to the office on October 4, 2002.
2. Claims 1-9 have been amended, claim 10 canceled, and claims 11-16 have been added.
3. Claims 1-9, and 11-16 are presented for examination.

Response to Arguments

4. Applicant's arguments filed on October 4, 2002 with respect to claims 1-9, have been fully considered but they are not persuasive for the reasons set forth below.
5. The examiner has completed a through study of the Applicant's remarks regarding claims 1-9 (Paper No. 13). These remarks are not persuasive.
6. As per claims 1-3, Applicant argues that the cited references Pyne (U. S. Pat. No. 5,721,907) and Carson (U. S. Pat. No. 5,978,805) do not teach "a file at the receiving end". Pyne teaches a method that identifies and isolates the differences between a source file located at a sending computer (i.e., source computer) and a reference file, located at a receiving computer (i.e., destination computer), that may have data similar to the data comprising the

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source file (See column 7, lines 28-34). Pyne shows by these passages that a matching of two files have been done.

Carson, in the same endeavor, teaches a method for synchronizing files stored in memory of two remotely located systems (See col.7, lines 9-27). Carson shows that a checksum match identifying the key and reference block that matched is transmitted to the destination system (i.e., receiving system) in order that the reference file block can be copied from the reference file to the source system in order to build the synchronization file between the two remote system.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant attacks the cited references (mainly Pyne and Carson) separately, which is "Piecemeal analysis".

The examiner has combined the two references for the following reasons: first the two references are from same field of endeavor "synchronizing files located at remote systems" and second, because Carson teaches "constructing at the receiving computer a target file from the data units in the reference file determined to have reference key values matching respective source key values and the data blocks from the source file received from the sending computer, wherein the constructed target file at the receiving computer is synchronized with the source file

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at the sending computer" (See Carson's Abstract, lines 9-18, Fig.1, col.3, lines 57-67 to col.4, lines 1-56 and Appendix A; col.7, lines 11-17; col.9, lines 12-14 "reconstruction file").

Therefore, It would have been obvious to a person of ordinary skill in the art, at the time of the Applicant's invention was made, to combine the teachings of Pyne with Carson's teachings for the motivation of actuating synchronization of two remotely system during the update files located at both systems.

The examiner asserts that the cited prior arts Pyne (U. S. Pat. No. 5,721,907) in combination with Carson (U. S. Pat. No. 5,978,805) teach or suggest the subject matter recited in claims 1-3 as required under 35 U. S. C. 103(a). (See rejections of claims 1-3 as set forth previously in the office action paper No. 9).

As per claims 4-6, Applicant argues that the cited references do not teach how the computation is distributed between sender and receiver. There is no limitations in claim 4 indicating how the computation is distributed between sender and receiver.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., how the computation is distributed between sender and receiver) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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As per claims 7-9, Applicant has attacked references individually and did not appreciate examiner's reasons for combining the references.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Pyne and Carson are combinable because they are from similar problem solving area synchronizing files located at remote systems.

It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to combine the teachings of a remote files transfer application as taught by Pyne with Carson's teachings for synchronizing files for the motivation of actuating synchronization during the update files located at both systems.

The combination of Pyne and Carson does not teach a proxy computer where the sending computer and the proxy computer are couple for communication therebetween by way of said network.

Mattis teaches a method for caching and delivering an alternate version from among a plurality of alternate versions of information objects (See Title and Abstract) including a proxy computer with a cache located in the proxy server that is logically interposed between the client computer and the server computer (See fig.1 and col.1, lines 66-67 to col.2, lines 1-14).

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It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination teachings as taught by Pyne and Carson by the proxy server interposed between the clients and the server as taught by Mattis because the proxy provides a middleman gateway service, acting as a server to the client and as client to the server. Therefore the client may be able to access replicas from a topologically proximate cache faster than possible from original web server, while at the same time reducing Internet server traffic during the synchronization process.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the knowledge generally available to one of ordinary skill in the art is that the client may be able to access replicas from a topologically proximate cache faster than possible from original web server, while at the same time reducing Internet server traffic during the synchronization process.

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7. Claims 11- 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyne (U. S. Patent 5,721,907) in view of Carson (U. S. Patent 5,978,805).

As per claims 1 and 14, Pyne teaches a method and apparatus for remote file transfer applications (See Title). The method as taught by Pyne invokes synchronizing data between a receiving computer and a sending computer, wherein the sending computer has a source file and the receiving computer has a reference file and the receiving and sending computers are coupled for communication therebetween by way of a communications link or network (See Abstract, Fig. 1 and col.3, lines 41-50), and comprising the steps of: i) computing source key values for sequential non-overlapping source blocks in the source file, each of said source blocks comprising a predetermined number of contiguous data unit (See Fig.3, elements 50a ...50c, “sequential non-overlapping blocks”, and col.5, lines 12-14); ii) transmitting the source key values from the sending computer to the receiving computer (See Abstract and col.2, lines 47-54); iii) at the receiving computer, comparing the source key values with reference key values computed for each predetermined number of contiguous data units in the reference file to determine matches between source key values and reference key values (See Abstract, col.2, lines 25-32 and col.5, lines 37-48); iv) communicating from the receiving computer to the sending computer an indication of which source keys do not have matching reference keys, and transmitting data blocks from the source file corresponding to the unmatched source keys from the sending computer to the receiving computer (See col.2, lines 37-46 and col.5, lines 49-63).

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Pyne does not explicitly teach a method for v) constructing at the receiving computer a target file from the contiguous data units in the reference file determined to have reference key values matching respective source key values and the data blocks from the source file received from the sending computer, wherein the constructed target tile at the receiving computer is synchronized with the source tile at the sending computer.

Carson, in the same endeavor, teaches a method and apparatus for synchronizing file stored in memory of two remotely located systems (See Title and Abstract) includes the limitations of: v) constructing at the receiving computer a target file from the contiguous data units in the reference file determined to have reference key values matching respective source key values and the data blocks from the source file received from the sending computer, wherein the constructed target tile at the receiving computer is synchronized with the source tile at the sending computer (See Carson's Fig.1, col.3, lines 57-67 to col.4, lines 1-56 and Appendix A).

Pyne and Carson are combinable because they are from similar problem solving area synchronizing files located at remote systems.

It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to combine the teachings of a remote files transfer application as taught by Pyne with Carson's teachings for synchronizing files for the motivation of actuating synchronization during the update files located at both systems.

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As per claims 12 and 13, Pyne teaches a file transfer method that identifies and isolates the differences between a source file located at a sending computer and a reference file, located at a receiving computer including the features wherein the reference key values are computed for overlapping and non-overlapping reference data (See col.9, lines 27-42).

As per claim 15, Carson teaches the claim limitation wherein storing the reference data location data identifying the location of the reference data block in the reference file (See Abstract , lines 1-2, and lines 14-18, col.1, lines 42-44, line 66 through col.2, line 5, and col.4, lines 43-53).

As per claim 16, Carson teaches the claim limitation wherein the overlapping reference data block is offset by one byte from the previous reference data block (See col. 8, line 66 through col.9, line 11, and col. 11, line 60 through col.12, line 22).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any response to this action should be mail to:

Commissioner of Patent and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 746-7239 (for formal communication intended for entry)

Or:

(703) 746-7240 (for informal or draft communications, please label

“PROPOSED” or “DRAFT”)

Hand - delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA, Fourth Floor Lobby (Receptionist Telephone No. (703) 305-3900).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (703) 305-7094. The examiner can normally be reached Monday through Friday from 9:30 AM to 4: 30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached on (703) 305-3830. The fax phone number for this group is (703) 308-5403.

Jacques Veillard

Jacques Veillard
Patent Examiner TC 2100

December 26, 2002

Hosain T. Alam

HOSAIN T. ALAM
PRIMARY EXAMINER